WHAT IS CLAIMED IS:

1. An oscillator comprising:

an oscillator circuit; and

an amplifier circuit for amplifying an oscillation signal from said oscillator circuit, said oscillator circuit and said amplifier circuit being connected to each other;

wherein said amplifier circuit includes an amplifier transistor, and a resistance changing unit located between the emitter of said amplifier transistor and ground.

2. An oscillator according to Claim 1, further comprising a control terminal from which a control voltage is applied to the oscillator circuit, a power supply for the oscillator circuit, a power supply terminal for the amplifier circuit, and an output terminal through which an output signal is output.

3. An oscillator according to Claim 2, wherein the amplifier circuit further comprises a plurality of capacitors, a plurality of resistors and a switch.

4. An oscillator according to Claim 3, wherein the power supply terminal is connected to a collector of the amplifier transistor, and a collector of the amplifier

transistor is connected to the output terminal via one of the plurality of capacitors, and is also connected to the ground via another one of the capacitors.

5. An oscillator according to Claim 3, wherein one of the resistors is connected between a collector and base of the amplifier transistor, and a base of the amplifier transistor is connected to the oscillator circuit via one of the capacitors and to the ground via one of the resistors.

6. An oscillator according to Claim 3, wherein one of the resistors is connected in parallel to a series circuit defined by another one of the resistors and the switch so as to constitute the resistance changing unit.

7. An oscillator according to Claim 6, wherein the switch is one of a transistor and a switch diode.

8. An oscillator according to Claim 3, wherein one of the resistors is connected in parallel to first and second series circuits so as to constitute the resistance changing unit, the first series circuit being defined by a second one of the resistors and the switch and the second series circuit being defined by a third one of the resistors and another switch.

9. An oscillator according to Claim 3, wherein one of the resistors is connected in series to a parallel circuit defined by another one of the resistors and the switch so as to constitute the resistance changing unit.

10. An oscillator according to Claim 3, wherein one of the resistors is connected in series to first and second parallel circuits so as to constitute the resistance changing unit, the first parallel circuit being defined by a second one of the resistors and the switch and the second parallel circuit being defined by a third one of the resistors and another switch.

11. An oscillator according to Claim 1, wherein said oscillator circuit oscillates while switching between a plurality of oscillation frequencies, and said resistance changing unit is switched according to the oscillation frequencies of said oscillator circuit.

12. An oscillator according to Claim 1, wherein said resistance changing unit includes a resistor and a switch.

13. An oscillator according to Claim 11, wherein said resistance changing unit includes a resistor and a switch.

14. A communication apparatus comprising at least one oscillator according to Claim 1.

16. A communi1cation apparatus comprising at least one oscillator according to Claim 11.

17. A communication apparatus comprising at least one oscillator according to Claim 12.

18. A communication apparatus comprising at least one oscillator according to Claim 13.